

AIR QUALITY HEALTH ALERT PLAN 2006

I. INTRODUCTION

During the ozone seasons of 2000-2002, local air quality monitors in the San Antonio region recorded ozone levels above the concentrations allowed by the federal clean air standard. In June 2002, area monitors recorded some of the highest values since 1998. The U.S. Environmental Protection Agency (EPA) clean air ruling states that the Metropolitan Statistical Area (MSA) is to be considered the boundary to develop future air quality plans. However, the MSA was redrawn during the air quality designation process. Therefore, the EPA decided to consider the previous MSA (consisting of Bexar, Guadalupe, Comal and Wilson Counties) as the San Antonio air quality region. Expecting that this area may be designated as non-compliant or “non-attainment”, the Alamo Area Council of Governments (AACOG) and the Counties and Cities within the air quality region submitted in 2002 an Early Action Compact to the Texas Commission on Environmental Quality (TCEQ) and the EPA. Under this agreement, the EPA agreed to designate the area “non-attainment (deferred)” and not require any of the traditional “non-attainment mandates”. More importantly, the area was given an opportunity to implement strategies quicker to clean up the air faster.

As of today, San Antonio is designated “non-attainment (deferred)”. A new three year average will be compiled using ozone measurements from 2005, 2006 and 2007. San Antonio will be redesignated in 2008. As long as average air quality readings for the three-year period stay below the standard, then the San Antonio area will not be designated “non-attainment”. Because of the economic and procedural challenges that face “non-attainment” areas, it is important that the San Antonio area stay vigilant with regards to air quality efforts and steer clear of “non-attainment”.

In an effort to reduce ozone pollution, the City of San Antonio has participated in TCEQ’s episodic “Ozone Action Day” program. In the San Antonio area, we call it Air Quality Health Alerts (AQHA). This program targets specific days that may result in high ozone levels. The TCEQ notifies the community of an impending AQHA by 2 PM the day prior to an anticipated high ozone day in order to provide the community time to modify activities. Through outreach efforts, citizens are provided information on altering activities that reduce emissions and pollution and consequently lower ozone levels.

This *Air Quality Health Alert Plan* (AQHAP) establishes guidelines and procedures for reducing emissions of ozone-forming compounds into the atmosphere, both on “Alert” days as well as throughout the ozone season. City Departments, through voluntary compliance with the AQHAP, will modify certain activities on AQHA days. This year will be the tenth year that the City has reviewed and implemented a plan to reduce ozone. All essential and emergency services remain unaffected. Since the implementation of the AQHAP, many Governmental Agencies, School Districts, and Industries have developed their own Air Quality Plans. To date, over 300 plans were developed by private industry, Local Governments and School districts, and Clean Cities Coalition Stakeholders. These Agencies have voluntarily committed to reducing air pollution by submitting their plans to the Council of Governments for record.

II.BACKGROUND AND HISTORICAL INFORMATION

What is ground-level ozone? Ground-level ozone is the major component of smog and is not typically emitted directly from any source. Ozone is generally created in urban environments as a result of air pollution. Uncontrollable factors such as sunlight, high temperatures and low winds combine with controllable emissions to form ground-level ozone. Emissions that contribute to ozone formation can be grouped into two basic classes: 1) volatile organic compounds (VOCs), such as fuels, solvents, paints, etc. and 2) oxides of nitrogen (NOX), which form as a by-product of combustion. Ground-level ozone can damage your health, aggravating allergies, asthma, and lung disease. Groups, such as children, field workers and the elderly, are most sensitive to increased levels of ground-level ozone.

The City believes that San Antonio can achieve clean air this ozone season if the entire community works together to reduce emissions, especially on AQHA days. To date, the San Antonio region has implemented numerous voluntary emission reduction programs, including episodic and year-round programs, use of alternative fuels in local fleets, and technical studies to characterize our situation. The two largest local sources contributing to ozone in San Antonio are: (1) area sources, such as residential and commercial painting, refueling activities, and construction sources; and (2) mobile sources including automobiles, trucks, etc. In order to improve air quality in San Antonio, reducing emissions from automobile engines is critical.

III. EMISSION REDUCTION MEASURES

Many City department's operations consist predominantly of indoor duties. However, the use of City vehicles is sometimes required. Therefore, emission reduction measures are related to: (1) the use of alternative fuels in the entire City fleet; (2) reductions in emission from fueling activities; and (3) reductions in vehicle miles traveled, including trip reduction, car-pooling, rescheduling, encouraging use of public transit.

Refueling Plan

Upon receiving AQHAD notification, Purchasing Department on-duty supervisors at all fueling facilities will post AQHAD signs at entrance gates advising drivers of the next day's AQHAD and to refuel before close of business. Immediate action will be taken by all employees to refuel all assigned vehicles. Gasoline pumps at North Loop, Northwest, Southeast, and Zarzamora Automotive Service Centers, Patrol East, Patrol South, Northside Police, Central Fueling Facility, and the Airport have been upgraded with vapor recovery systems. With this addition, vehicles will be allowed to refuel without restrictions during the ozone season. Vehicles refueling with diesel, propane or compressed natural gas will not be restricted, nor will vehicles refueling at a service center retrofitted with Stage II VRS. All essential emergency service vehicles will be allowed to refuel as needed. A list of Designated Essential Vehicles have been established and are reviewed by the Public Works, Environmental Services, and Purchasing Departments and maintained by the Automotive Operations Division.

City Motor Pool Operations

During AQHADs, City motor pool vehicles will be issued only to drivers that have been cleared by their Department or Assistant Director, or Liza Meyer, Special Projects Coordinator – Air and Energy or Appointed Department Environmental Advisor(s) to perform essential duties. Such authorization will be documented on an authorization form furnished by each department to the Automotive Operations Division of Purchasing and General Services.

IV. AIR QUALITY HEALTH ALERT DAY NOTIFICATION PROCEDURE

To implement this AQHAP and to monitor progress and compliance, each department director has appointed one individual for the Department Environmental Advisors (DEA) insuring that all of the City's efforts are coordinated. The Environmental Services Department will notify each coordinator when AQHA are announced by the TCEQ. The DEA is then responsible for ensuring all departmental personnel are notified. When an Air Quality Health Alert Day is called:

1. The TCEQ will notify the AACOG by 2:00 PM the day prior to the predicted event. AACOG administers a fax broadcast system to over 300 organizations in the San Antonio region notifying them of an upcoming AQHAD. The Environmental Services Department is the first point of contact at the City.
2. The Environmental Services Department will notify each DEA or alternate. Notification will be made by e-mail to all city employees by e-mail. Alternative notification arrangements can be made for DEAs who do not have regular access to the City email system. Employees will also be notified by an e-mail message sent to all COSA users from the Environmental Services Department. DEAs are responsible for notifying their department and all employees who do not have access to e-mail. Employees are encouraged to respond to notifications received from TransGuide, local media, or other forms of communication.
3. Station One will have a direct calling list for weekend notification.
4. Employees may contact the Environmental Services Department, at 207-6449, or the TCEQ hotline, at 1-800-64TEXAS, if they need to confirm an AQHAD or are not receiving notification.

The individual Department Directors and DEAs will be responsible for the implementation of their departmental action plan. The Environmental Services Department will assist in insuring compliance by monitoring and providing recommendations to the Departments.

V. DEPARTMENT ENVIRONMENTAL ADVISORS

DEPARTMENT	ADVISOR	PHONE
Alamodome	Darryl Baethge	207-3671
Asset Management	Lucrecia Cisneros	207-4032
Aviation	Cliff Hughes	207-3478
City Attorney	Tom Shute	207-8954
City Clerk	Jim Randle	207-6384
City Council Offices	Gayle McDaniel	207-7045
City Manager's Office	Melissa Vossmer	207-6912
Code Compliance	Barbara Trout	207-8200
Community Initiatives	Cruz Sanchez	207-7854
Contract Services	Mark Webb	207-7039
Convention and Visitors' Bureau	Janice Schmees	207-6700
Convention Facilities	Robert Carr	207-8528
Cultural Affairs	Lewis Andrews	207-6962
Customer Service/311	Linda Wasserman	207-3313
Development Services	Brenda Guzman	207-8371
Economic Development	Anita Martin/Ed Summers Susan Rios/Ed Davis	207-3901/ 207-3949/ 207-8163/ 756-4198
Enterprise Resource Management System	Troy Elliott	207-8604
Environmental Services	Liza C. Meyer	207-6449
External Relations	Scott Wudel	207-4494
Finance	Leticia Wawrzyniak	207-8648
Fire/EMS	Steve Worley	207-8462
Housing and Community Development	Drew Cameron	207-6620
Human Resources	Rosemary Avalos	207-2030
Information Technology Services	Curtis Klaerner	207-7575
International Affairs	Cynthia Silva	207-8190
Library	Richard Denning	207-2625
Management and Budget	Kevin Ayarzagaitia	207-8339
Mayor's Office	Teresa Vasquez-Romero	207-7067
Municipal Court	Craig Christie	207-7553
Neighborhood Action	Richard Collins	207-5408
Parks and Recreation	Debbie Thompson	207-3021
Planning	Rose Rangel	207-7877
Police	Rosemary Flammia	207-7340
Public Utilities	Jeff Pullin	207-6191
Public Works	Jason Cosby	207-7785
Purchasing and General Services	Steve Morando	207-7122

VI. ADMINISTRATIVE DEPARTMENTS' PLAN

Because of the emission reductions resulting from the use of alternative fuels and the installation of vapor recovery systems at fueling facilities, the AQHAP was modified to provide more flexibility in vehicle operations. However, there are still some activities, such as the use of small gasoline-powered equipment that do not have catalytic converters, street paving, paint striping, and others, that remain prohibited on AQHADs. On AQHADs, all departments will implement the following:

- **Restrict all movement in City vehicles to an absolute minimum.**
Use of City Motor Pool vehicles will be restricted to essential use only. Meetings requiring traveling by City vehicles are to be canceled, or implement the use of e-mail and conference calls.
- **Minimize scheduling of morning meetings between the hours of 8:00 a.m. and 9:00 a.m. when possible or teleconference.**
Because AQHADs are declared with only one-day notice, this practice of delaying meetings should be encouraged year-round.
- **Practice appropriate vehicle operating tips.**
For example, such as shutting off the engine when parked, avoiding excessive idling such as sitting at drive -thru's, and leaving the vehicle running while parked. Operate the vehicle only on an as-needed basis to reduce emissions. Avoid travel through known congested areas whenever possible.
- **Consider your work schedule to reflect limiting vehicle and equipment use.**
Encourage multiple crew transports using higher occupancy rate vehicles.
- **Reschedule nonessential operations.**
For example, lawn maintenance, tree trimming, and use of power saws, generators, etc., which include other gasoline-powered equipment.
- **Reschedule nonessential outdoor painting activities and activities requiring solvent use.**
Postpone all solvent and paint use to evenings or on a non-Air Quality Health Alert Day.
- **Reschedule nonessential paving activities,**

Year-round, all departments will implement the following:

- 1) **Flextime:** Each Department will evaluate and implement their approved flextime policy with the purpose of minimizing congestion during peak traffic hours.
- 2) **Telecommuting:** Each Department will evaluate and implement a seasonal or year round telecommuting policy to minimize the overall number of vehicles traveling to and from City work areas.
- 3) **Service Contracts:** Department specific AQHA requirements will be incorporated into purchase and service contracts.
- 4) **Annual In-House Training:** Development of an annual training program to increase awareness of AQHAP responsibilities of Departments and employees. Placement of the AQHAP into orientation packets for new employees.

- 5) **Encourage use of public transportation and carpooling.** The City has a bus pass subsidy program and a carpool program for its employees. Call 207-6449 for more information on how to participate. Flexibility on start times will be granted to employees who ride the bus or carpool on AQHADs.
- 6) **Practice energy conservation** in City buildings, including but not limited to: turning off lights and computers and limiting air conditioning uses.
- 7) **Educational materials** on the AQHAP and air quality in general are available to all employees and customers. To request education materials or for staff assistance in presentations, please contact the Environmental Services Department at 207-6449.
- 8) Employees are encouraged to implement similar emission reduction measures at their homes.

Departments are directed to follow the plan as outlined above and to reschedule nonessential activities that result in emissions during AQHADs. Department Directors may modify this plan on a case by case basis if certain activities are essential to meet departmental goals. However, it is vital to our community that each City employee provides an example of what can and must be done to improve air quality.

VII. DEPARTMENT SPECIFIC PLANS

The following departments will implement department-specific AQHAPs, taking into account their specialized services and goals:

**Aviation
Environmental Services
Parks & Recreation
Development Services
Fire
Police
Convention Center Facilities
Metropolitan Health District
Public Works
Purchasing**

Note: Operations of these departments include the use of equipment that may result in significant air emissions. Specific plans are also included for departments which deliver health and public safety related services.

AVIATION

- Airport Rescue & Firefighting will reschedule or delete job tasks as follows:
 - All drills and equipment testing will be rescheduled to off-peak times.
 - Housekeeping duties which involve the use of motor vehicles or motorized equipment will be rescheduled.
 - Parking shuttle buses will practice appropriate vehicle operating tips, such as shutting off the engine when parked and operating on an as-needed basis.
- Airport Maintenance will reschedule or delete job tasks as follows:

- Except as required for compliance with Federal Aviation Regulations, mowing, trimming, and landscape activities which require the use of gasoline-powered engines will be altered to off-peak times or deleted for a cycle.
- All exterior painting activities will be rescheduled.
- Construction equipment and asphalt pavement placement will be scheduled for optimum air quality days.
- Construction activities may take place during AQHADs if deemed essential.
- HVAC will suspend Freon recovery operations during AQHADs.
- Airport Police and Ground Transportation Agents will monitor curbside activities at the terminals for excessive idling of vehicles and assist with public advisories.
- Airport Operations will monitor conditions of vehicular use on the Air Operations Area of the Airport, as well as aircraft engine run-ups, and work closely with tenants to assist in control of excess emissions.
- All nonessential inspections that require vehicle use will be altered to off-peak times during AQHADs.
- Planning & Engineering will monitor construction activities and work closely with contractors to reschedule activities, reduce the use of or completely cease those functions or equipment operations which will contribute to poor air quality.
- Airport Parking will ensure all lot entries are in operation to avoid lines of idling vehicles waiting for entry. Likewise, monitor exit lane traffic and staff exit booths accordingly, to avoid excessive lines of idling vehicles waiting to exit.
- No fuel transport will be accepted for off-loading on AQHADs. All other off-loads of fuel will be limited to very early mornings or late evenings.
- Automotive shop vehicle engine test runs will be altered to off-peak times or rescheduled for a later date.

BUILDING INSPECTIONS

- On AQHADs, supervisors will have an appointed number of personnel to meet them at the different service centers for the purpose of car-pooling to work.
- Supervisory personnel will transport the mail from the different service centers.
- Overtime which requires use of vehicles will be limited, except for emergencies.
- There will be no sign pickup by the Sign Section.
- There will be no bus bench ad inspections.
- Modified (flex time) reporting times will be considered for employees using public transportation.

CONVENTION CENTER FACILITIES

- The Convention Facilities Department will modify or reschedule activities to assist in reducing the amount of VOC and NOx generated.
- Use of Convention Facilities' forklifts will be restricted to essential use only. As much as possible, all use will be rescheduled to non-AQHADs.
- All gasoline powered equipment such as leaf blowers, pumps, etc., will not be utilized.
- Testing of the emergency generator will not be scheduled.
- All painting activities will be rescheduled.

- All contracted services that can be rescheduled to non-AQHADs will be rescheduled.
- Notices will be provided to Convention Facilities Clients concerning AQHAD Measures and advising them on how to assist the City in reducing the amount of VOC and NOx generated emissions.

ENVIRONMENTAL SERVICES

On AQHADs, the following practices will be implemented:

- Reschedule nonessential operations using gasoline-powered equipment, such as lawn mowers, edgers, blowers, power saws, tree trimmers, and generators.
- Freon extraction shall be suspended.
- Reschedule nonessential construction.
- Operation of construction and heavy equipment will be restricted to essential use.
- Personnel shall be assigned at the job site to limit travel.
- Alternate work scheduling will be implemented to allow supervisors to permit employees flex-time scheduling and telecommuting.

FIRE

- Reduce the movement of nonpublic safety city vehicles, i.e., and reschedule deliveries.
- Field (tanker) refueling operations will be suspended.
- Reschedule bonfire permits.
- Reschedule control burning permits.
- Reschedule blasting permits.
- Reschedule indoor pyro and outdoor fireworks displays.
- Reschedule nonessential inspections on commercial establishments.
- Suspend starting the apparatus, engines, generators and PPVs at shift changes.
- Suspend hose practice and driving practice.
- Reschedule preventative maintenance.
- Suspend outdoor cooking.

METROPOLITAN HEALTH DISTRICT

- Outreach operations will be curtailed or deferred as much as possible, so long as the health of our clients is not compromised.
- Short notice leave requests will be considered if employees remain at home.
- Employees should remain in one location during the workday if possible.
- Bringing a lunch or walking to a nearby restaurant will be encouraged.
- Vector Control operations will be substituted with in-service training.
- All operations of Animal Control and emergency Bee Calls will be exempted.
- All employees are expected to comply with the provisions of this plan. Supervisors will be held accountable for the implementation of said plan.

PARKS & RECREATION

On AQHADs, the following operations will be suspended:

- Lawn mowing, edging, leaf blowing, sawing, trimming, or other operations involving the use of 2-cycle oil mixture equipment or engines.
- Spraying of insecticides and herbicides.
- Mixing, paving, and street patching in parks with hot asphalt concrete.
- Nonessential construction and heavy equipment use.
- Graffiti removal by spraying.
- Parking lot striping and sign painting by spraying.
- Non-essential 4-cycle mowing equipment or engines.

POLICE

Each Division ensures that all Units within the Division have an AQHAP that will be implemented upon notification of an AQHAD. Unit AQHAP's are formulated to the activities of each individual Unit.

Individual Unit AQHAP's should include items from the following:

- Reduce use of nonemergency vehicles
- Reschedule nonessential operations
- Enforce polluting vehicle ordinances or statutes (Uniform Division)
- Curtail use of Police Department Fleet
- Driver training for cadets and in-service will be delayed until 9:00 a.m. on AQHADs.

PUBLIC WORKS

On AQHADs, the following practices will be implemented:

- Reschedule nonessential operations using gasoline-powered equipment, such as lawn mowers, edgers, blowers, power saws, tree trimmers, and generators.
- Reschedule street striping and other painting activities.
- Reschedule graffiti removal activities.
- Reschedule nonessential construction.
- Field (tanker) refueling operations will be suspended during AQHADs.
- Operation of construction and heavy equipment will be restricted to essential use.
- Personnel shall be assigned at the job site to limit travel.
- In-house paving operations and mixing of hot asphaltic concrete will be suspended.
- Spraying of insecticides will be suspended.
- Crews will be reassigned to various manual tasks such as erecting signs, site cleanup, etc.

PURCHASING

- The use or operations of gasoline driven lawn mowers, edgers, blowers, power saws, generators, etc., will be prohibited. Repairs to such equipment may be undertaken but testing will be delayed until the advisory has been lifted.
- Idling of vehicles or equipment being repaired or serviced will be kept to an absolute minimum. Only public safety vehicles (Police & Fire) will be road tested.
- Motor Pool vehicles will only be issued to drivers that have been cleared to perform essential duties.
- Meetings which require the movement of personnel by vehicle will be re-scheduled to begin not earlier than 10:00 a.m.
- Painting on vehicles or equipment will be strictly prohibited.
- For vehicles assigned to each division, travel will not be initiated without the approval of the DEA. Request for such travel must be justifiable as essential to operations.
- Approved travel will be restricted to the essential function justified only.
- Idling of vehicles during approved travel must be kept to the absolute minimum. Under no circumstances will vehicles be left idling for the sole purpose of keeping the vehicle cool through use of the air conditioning system.
- The use of gasoline engine driven compressors to power pneumatic tools on service vehicles will be closely monitored by section supervisors. Except for tasks requiring impact wrenches, compressors will not be started.

VIII. EXISTING CITY OF SAN ANTONIO LONG-TERM ACTIONS TO REDUCE EMISSIONS

The City of San Antonio has implemented a number of programs to reduce adverse impacts of emissions on air quality. The following programs have the long-term benefit of providing a cleaner year-round operation while allowing for an enhanced level of service to the community.

Ultra-low Sulfur Diesel

- Implemented voluntary introduction of an ultra low sulfur diesel for the City's and off-road diesel vehicles

Air Improvement Resources (AIR) Committee

- The City of San Antonio in partnership with Bexar County, Alamo Area Council of Governments, and the Metropolitan Planning Organization coordinates policy, technical, and outreach issues for the San Antonio area.

Public Education and Outreach

- Work with area governmental entities and local media to develop outreach programs

Fuel Facilities Upgrade

- Stage I Vapor Recovery Systems (VRS) are in place on the underground gasoline storage tanks at all City fueling facilities to enable recycling of fumes from the underground storage tank back to the tanker truck .
- Stage II VRS are in place on gasoline dispenser pumps at all nine eligible fueling facilities to allow for recovery of gasoline vapors from vehicle refueling. The vapors are recycled back to the underground storage tank.

Ozone Season Refueling Plan and City Motor Pool Operations

- The installation of Stage I and Stage II VRS, all vehicles, gasoline, diesel, and propane, were allowed to refuel at all facilities without restrictions. All employees were strongly encouraged to refuel after 3 PM the day before an AQHAD episode.
- During AQHADs, City motor pool vehicles are issued only to drivers cleared to perform essential duties by their Department Director, Assistant Director or Daniel V. Cardenas, Director of Environmental Services Department.

Emissions Testing

- The Purchasing Department implements a modified Inspection & Maintenance (I/M) Program using a four-gas emissions analyzer. All vehicles are tested by the I/M Program during the annual safety inspection. Any identified problems are corrected and the vehicle is re-tested.

Employee Bus Pass Program

- To encourage employee bus ridership, the City has a bus pass subsidy program for its employees.

Flextime Policy

- The City has implemented a flextime policy for all employees. Department Director's shall implement their individual flextime programs for their employees.

Synchronization Program and Energy Efficiency Measures for Traffic Signals

- There are approximately 1,100 signalized intersections, 68% in coordinated mode and within the last five years, all have been retimed with help from the Governor's Energy Management Center & TxDOT using the Oil Overcharge Restitution Act. The City matched funds of \$2,068,460 from 9 grant programs which were used to upgrade the existing signal system.
- In 2004 the City installed high-efficiency LED traffic signals for 1096 traffic intersections

Preservation of Trees

- The City's Landscape and Tree Preservation Ordinance attempts to preserve existing trees, encourage the planting of new trees, and encourage responsible development. The City's Arborist can provide information on trees beneficial to air quality.